

PREGUNTA 1

Evalúe, si existe:

$$\lim_{x \rightarrow -2} \frac{4x-1+x^2\sqrt{x+6}-\sqrt[3]{x+1}}{\sqrt[4]{3x+22}+\sqrt{x^2-3}-3}$$

$$a^n - b^n = (a-b)(a^{n-1} + a^{n-2}b + \dots + a^2b^{n-2} + ab^{n-1} + b^n)$$

$$\sqrt[4]{3x+22} \neq 2$$

$$3x+22$$

$$(3(x+2)) \neq 16$$

$$4(x+2)$$

$$\lim_{x \rightarrow -2} \frac{(-3\sqrt{x+1} - 1) + (4x+8) + x^2(\sqrt{x+6}-2) + 2(x^2-4)}{(\sqrt{x^2-3}-1) + \sqrt[4]{3x+22}-2}$$

$$- \frac{(\sqrt[3]{x+1}+1)}{A} A = - (x+1+1)$$

$$A = \left(\frac{2\sqrt{x^2-3}}{\sqrt{x+1}} \right)^2 - \sqrt{x+1} + 1$$

$$B =$$

$$C =$$

$$D =$$

$$E =$$

$$F =$$